REMARKS

Claims 2-30 remain in this application. Claims 2-30 are rejected. Claim 1 is previously cancelled. Claims 15, 16, 20, 21, and 24-26 are amended herein to clarify the invention and to address matters of form unrelated to substantive patentability issues.

CLAIM REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 2, 15, and 21-30 are rejected as obvious over Eisenbrey in view of Powell under 35 U.S.C. §103(a). The applicant herein respectfully traverses this rejection. For a rejection under 35 U.S.C. §103(a) to be sustained, the differences between the features of the combined references and the present invention must be obvious to one skilled in the art.

It is respectfully submitted that a *prima facie* case of obviousness is not established in rejection of claims 2, 15, and 21-30 as they stood before the present amendment and cannot be established with regard to the presently amended claims. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." MPEP §706.02(j) "Contents of a 35 U.S.C. §103 Rejection". It is

PAGE 16/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16

respectfully submitted that the references fail to disclose the first sensor of the claims, suggestion to combine the first sensor with the second sensor, the orthogonal relationship of the detection directions of the first and second sensors, and the first curved surface and retaining device effecting glove fitting of the signal generating device.

The Examiner cites the Eisenbrey reference for teaching the second sensor for sensing acceleration and then turns to the Powell reference for teaching the first sensor for sensing an impact. In particular, the Examiner avers that Powell teaches the following language of claim 15 (as it existed prior to the present amendment):

> said first signal being indicative of a change in a state of said signal generating device being moved by said game player from a third location to a fourth location by movement of said signal generating device retained by the game player, said change in the state being measured as a difference other than the change in velocity of the first sensor when at said third location and said state when at said fourth location. Office Action of September 14, 2004, page 5.

It is respectfully submitted that Powell clearly fails to provide such a teaching.

The Examiner relies on the Eisenbrey reference for teaching an acceleration sensor. Eisenbrey relates the following possible embodiment of the acceleration sensor:

> In an alternative embodiment, shown in FIG. 7, the mass 30 is fixed on one end of spring 90. The other end of spring 90 is fixed within the housing 22. The mass 30 is free to move within the cavity, in and out of operative relation with the acceleration activated switch 35. In this alternative, the shape of the mass is not dictated by the geometry of any guide ra

The above disclosure presents merely a biased mass which moves to close a switch 35 when decelerated.

PAGE 17/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16

The Examiner claims that Powell teaches an impact sensor, in contrast to the acceleration sensor of the Eisenbrey reference. However, the sensor in Powell is nothing more than an acceleration sensor operating in the same manner as described in the Eisenbrey reference. The Powell reference provides a movable contact arm 34 which is a mass biased by the spring 38 and which closes a switch composed of the arm 34 and stationary arm 32. This clearly fails to satisfy the above quoted language of claim 15 which requires "said change in the state being measured as a difference other than the change in velocity of the first sensor when at said third location and said state when at said fourth location." The only way the "contact motion switch" of the Powell reference operates is by changing state based on a change in velocity which allows the inertia of the arm 34 to overcome the bias of the spring 38 to close the contacts comprised of the pivoting arm 34 and the stationary arm 32. As such the Powell reference clearly fails to provide a basis for the obviousness rejection.

In view of the above rejection, applicant has decided merely to further clarify the operation of the first sensor in the present claim amendments to remove the possibility of misinterpretation of the claim meaning. Claim 15 is now amended to recite the following:

> a first sensor for sensing an impact of the signal generating device requiring an impact contact of the second surface of the signal generating device with an external object[.]

The required operation of the first sensor is further defined a follows:

> said first sensor generating a first signal in response to said hitting motion of the game player effecting said impact contact of the second surface of the signal generating device with the external object when said impact is sensed while the game player is in motion with said signal generating device[.]

PAGE 18/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16

Independent claims 16, 20 and 21 are similarly amended. In the present invention the second surface is supported by the disclosure of the first layer 20, which activates the impact sensor 30 via the second and fourth layers.

Although the claim language prior to the present amendments distinguished the first sensor from the sensor of the Powell reference, the above language now presented clearly distinguishes the first sensor from the Powell teaching by requiring impact contact with an external object. The Powell device may be triggered merely by deceleration as is clearly the intent demonstrated by the figures wherein the user is allowed to "simulate" a kick or a punch, obviously without making any contact, hence the word "simulate." As such, the Powell reference is not a sufficient teaching of the claimed first sensor.

It is further submitted that the references fail to provide sufficient suggestion to combine the acceleration sensor with the "contact sensor" of the Powell reference, much less the first sensor as presently claimed. The Powell reference, as noted above, merely teaches an acceleration sensor. The Eisenbrey reference solely teaches use of acceleration sensors. Hence, two references teaching acceleration sensors are presented providing no incentive to combine an acceleration sensor and a impact contact sensor as claimed. In both references acceleration sensors are sufficient and no need for detecting actual contact is hinted at. As such the references provide no suggestion to provide an acceleration detecting sensor and a sensor for detecting impact contact with an external object.

In the Office Action, the Examiner merely speculates that one would use a momentary contact switch in combination with the Eisenbrey reference to "know when a punch has landed on an opponent making the game even more realistic." However, the prior art does not support such conjecture. The Eisenbrey reference has nothing to do with boxing or martial arts which would involve landing punches

PAGE 19/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16

on an opponent. It merely teaches an acceleration activated joystick which is used for effecting exercise while playing video games. While the Powell reference is directed to martial arts simulation, nothing would suggest detecting actual contact since the whole premise is *simulation* of martial arts. The Examiner's theory of detecting "landing punches on an opponent" thus has no support in the reference since simulation absent actual contact is the goal of the reference. Furthermore, if a punch was actually landed on an opponent, it would be totally unnecessary to have an impact contact sensors as claimed to know when a punch is landed for realism since it would be realistic enough to actually hit the opponent. How would a sensor make actual contact, as required for the sensor of the claim, more "realistic?" Accordingly, it is respectfully submitted that the references fail to provide the requisite suggestion to make the claimed combination required to support an obviousness rejection.

Claims 15, 16, 20 and 21 also recite the following feature of the present invention which is totally absent from references:

> a signal generating device having a first curved surface, a second surface opposing said first surface, and a retaining device retaining said first curved surface in a palm of a game player in a glove fitting manner permitting transfer of a hitting motion and a swinging motion imparted thereto by said game player[.]

The first curved surface of the signal generating device fits in the palm and is retained there by a retaining device, for example strap 36, so that the signal generating device covers the palm side of the like a glove. Also, the second surface which is used by the first sensor for generating the contact signal is opposite the first curved surface. This configuration is nowhere suggested in the

PAGE 20/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16

references. There is no structure provided by the reference which would provide a contact surface in opposition to one's palm nor the curved first surface.

Claims 24 through 26 are directed to the sensing directions of the first and second sensor. Claim 24 requires that the impact sensing direction be orthogonal to the bottom surface which is the second surface opposing the curved first surface. This provides for the functionality of detecting palm slapping motion induced contact. Claim 25 requires that the second sensor, the acceleration sensor, detect acceleration in a direction parallel to the bottom surface, thus necessarily orthogonal to the operation direction of the first sensor. This is clearly counterintuitive because acceleration in a direction would lead one to anticipate contact in that direction, not a direction orthogonal to it. The Examiner merely contends that such arrangements would be "well within standard engineering design guidelines." While standard engineering guidelines may dictate how much stress a beam can carry, or the amount of current a particular gauge wire should carry, the Examiner has provided no documentation that would provide a teaching of the claimed directional orientations of an acceleration sensor and an impact sensor in a game system. It is requested that the Examiner provide such teaching if rejection of these claims is to be maintained.

Claims 3-14, and 16-20 are rejected as obvious over the Sagawa reference in view of Eisenbrey and further in view of Powell under 35 U.S.C. §103(a). It is respectfully submitted that the proffered combination of references cannot render the rejected claims obvious because the Sagawa reference does not provide the teachings noted above that are absent from the secondary references. Thus, the combination of prior art references fails to teach or suggest all the claim limitations.

PAGE 21/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16

Thus, it is respectfully submitted that the rejected claims are not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejections of claims 2-30 and their allowance are respectfully requested.

OBVIOUSNESS DOUBLE PATENTING REJECTIONS

Claims 2-30 are rejected under the judicially created doctrine of the "obviousness" type double patenting rejection as unpatentable over claims of U.S. Patent No. 6, 669,563.

With regard to the "obviousness" type double patenting rejection, the assignee herein files, without prejudice, a terminal disclaimer in compliance with 37 CFR 1.321(b) pursuant to 37 CFR 1.78(d) in order to overcome the double patenting rejection.

TERMINAL DISCLAIMER FEE

A terminal disclaimer in compliance with 37 CFR 1.321(c) is herein filed. Please charge the corresponding fee of $130.00 to Deposit Account No. 10-1250.

TIME EXTENSION REQUEST

Applicant respectfully requests a two month extension of time for responding to the Office Action. Please charge the fee of $450.00 for the extension of time to Deposit Account No. 10-1250. A Request for Continued Examination is filed concurrently herewith.

PAGE 22/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16

Docket No. F-6636 Ser. No. 09/655,511

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

Respectfully submitted,
JORDAN AND HAMBURG LLP

By _____
Frank J. Jordan
Reg. No. 20,456
Attorney for Applicants

and,

By _____
Herbert F. Ruschmann
Reg. No. 35,341
Attorney for Applicants

Jordan and Hamburg LLP
122 East 42nd Street
New York, New York 10168
(212) 986-2340

enc: Terminal Disclaimer; and Request for Continued Examination.

PAGE 23/27 * RCVD AT 2/14/2005 9:19:54 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:516 624 2215 * DURATION (mm-ss):06-16